# Western Australian Greenhouse Gas Estimates 2012



#### The Office of Robin Chapple MLC

Member for the Mining and Pastoral Region PO Box 94, West Perth WA 6872 41 Havelock Street, West Perth. WA 6005

Phone: (08) 9486 8255 | Email: Robin.Chapple@mp.wa.gov.au Freecall: 1800 138 610 | Web: http://robinchapple.com/

#### **Foreword**

I have become increasingly concerned that in Western Australia our greenhouse gas emissions are rising sharply, and our State Government is not paying attention.

As the primary regulator of industry in our state, it is obvious that the State Government should play a key role in facilitating our transition from a carbon intensive economy to a low carbon clean economy.



However, the current State Government has no policy on how we will seek to meet Kyoto and National targets, and it articulates no targets of its own. While major 'covered sector' carbon emitters must report to the Commonwealth Government, our State Government doesn't have full access to the detail of these records. Additionally it does not consider the cumulative effect of greenhouse gas emissions when considering major industry proposals, nor does it impose any kind of emissions reductions measures on polluting industries.

Concerned that the State is derelict in its duties, my Office has undertaken extensive research to gain a clear and comprehensive picture of greenhouse gas emissions in Western Australia. The Office reviewed publicly available data from the National Greenhouse and Energy Reporting Scheme (NGER), WA Environmental Protection Authority reports, and sourced information from companies directly. The full data set from our research is published in this report and associated documents.

The findings are highly concerning. In the coming decade, when we should be slowing our growth of carbon emissions and making clear plans to reduce our future emissions, in Western Australia we are set to increase our greenhouse gas emissions at an alarming rate.

The agenda should be clear for a forward thinking State Government. Western Australia needs our Government to be planning and investing in a low carbon economy with the same passion it has demonstrated for facilitating the carbon intensive mining and fossil fuel sectors.

I hope this report is illuminating and demonstrates the need to work collaboratively towards a low carbon future for our environment and society.

Sincerely

Robin Chapple MLC

R. H. Cylin

# **Table of Contents**

Foreword	1
Background	3
Western Australia's Emissions Trajectory	3
Tracking Towards National Targets	4
History of the Kyoto Protocol Targets	5
Per Capita in Perspective	6
WA's True Influence on Carbon Emissions	8
A Call for Economic Equity	13
The Research Limits of this Report	14
The Legal Limits of Reporting Frameworks	15
A State Government Strategy?	16
Glossary	18
Further Peading	10

#### **Background**

## **Western Australia's Emissions Trajectory**

Western Australia's emissions in 1990, the benchmark year for Kyoto Agreements, were 52.0<sup>1</sup> million tonnes of carbon dioxide equivalent, and by 2010 this had grown to 74.3 million tonnes. Our research shows that emissions are now in the region of 85 million tonnes of carbon dioxide equivalent per annum.

The most worrying finding of our research is that new industrial development pending approval by the WA Government is set to emit a further 83 to 128 million tonnes per annum. This significant increase, on top of current rates, would see our emissions more than double during the coming decade, and more than triple that of our reporting base year of 1990.



The Barnett Grylls government has not just watched this explosion in carbon emissions happen. This government is actively funding and facilitating the developments, at the expense of the environment, with no checks and balances in place to ensure climate responsible practices.

The State Government is funding hundreds of millions of tax payers' dollars into these developments including:

- \$124,383,000 for the much maligned proposed James Price Point gas hub, which is projected to emit from **7.1 to 32Mtpa** of CO2 at full production;
- \$8,548,000 committed in the state budget for the Wheatstone Project (Ashburton North), projected to emit **10-15Mtpa** once it hits production of 25Mtpa of LNG;
- Verve Energy has an allocation of \$225.5 million over the forward estimates on its fossil fuel portfolio including \$88.9 million to refurbish the Muja power station, reopening the oldest and most carbon intensive parts of this power station.

In comparison, Verve will spend \$21.3 million on renewables – completing only one wind farm.

<sup>&</sup>lt;sup>1</sup> WA Greenhouse Strategy September 2004



# **Tracking Towards National Targets**

Recently released National Greenhouse Gas accounts show Australia's carbon pollution is at 104% of 1990 levels – apparently on track with the country's Kyoto Protocol target to limit emissions to 108% of 1990 levels, on average, over the period from 2008 to 2012<sup>2</sup>

However it must be noted that this is as a

result of some very lenient Kyoto Protocol commitments, which outlined that Australia's emissions can increase to 8 per cent above the 1990 baseline.

In fact, the nation released 546 million tonnes more carbon dioxide than its land mass absorbed last year, not including the data from changes in land use and logging, which is recorded separately. This is a 0.6 per cent increase on the 2010 emissions figure, primarily driven by an increase in vehicle use and fugitive gases from coalmines.

The new data shows that emissions equal an average of **24.3 tonnes** of greenhouse gases a year for every person in Australia, a higher amount per capita than the US, which also recently released its national greenhouse inventory for 2010<sup>3</sup>. The NGGI data indicates that the trend increase was largely driven by increases in transport emissions and from fugitive emissions as a result of increased mining of black coal.

While some positive progress was made nationally on emissions reductions in some areas, such as emissions from electricity generation which dropped slightly - from 196 to 194 million tonnes, suggesting that renewable energy is making up the increase in electricity generation, other areas didn't fare so well - vehicle emissions rose about 4.8 per cent, from 83 million to 87 million tonnes of carbon dioxide.

http://ageis.climatechange.gov.au/ website as at 27/04/12

<sup>&</sup>lt;sup>3</sup> http://epa.gov/climatechange/emissions/usinventoryreport.html website as at 27/04/12.

#### **History of the Kyoto Protocol Targets**

While tracking towards meeting Kyoto targets might seem like progress, what is largely overlooked is the history of the agreement made with Australia on its Kyoto target. Australia negotiated a target in 1997 which allowed an increase in Australia's greenhouse emissions by eight per cent above 1990 levels. This, by global standards, was considered to be a very relaxed target for a developed country with a strong economy.

Australia's 1997 Kyoto delegation secured a concession with the inclusion of what has often been referred to as the 'Australia clause' in Article 3.7 of the Protocol. This allows Annex 1 nations for whom land use change and forestry represented a net emissions source in 1990 to include this amount in the 1990 national emissions inventory for the purposes of calculating their agreed target. Only two signatory nations were allowed this excess emissions target, all others committed to emissions reductions.

Under the Kyoto Protocol, 1990 was the year set as the baseline for assessing greenhouse gas emission targets for each country. In 1990 in Australia, unusually large tracts of land were cleared, mainly in Queensland. Australia's land clearing rate was so high at the time, and because land clearing releases carbon dioxide into the atmosphere, Australia's emissions profile reflected this and our then emissions profile inclusive of land clearing emissions determined the baseline against which targets were set.

This ultimately meant that the government would have to do little to reduce emissions other than reduce land clearing. Thus rather than actively reducing emissions from fossil fuel sources, Australia was able to stabilise emissions growth by curbing land clearing and claim this as tracking towards our emissions reduction target.

Consequently, over the following years, Australia has largely been able to allow emissions from fossil fuel / mining and resources sectors to steadily increase as controls on land clearing reduced emissions from that sector by 75.6Mt or nearly 60%. Conversely, between 1990 and 2004, stationary energy generation emissions grew by 84Mt CO2e or 42%, and transport by 14.5Mt or 23.4%.

So it can be argued that the Kyoto Protocol target was not necessarily a step in the right direction for environmental protection, but in some respects represents an open door policy for polluting industries to contribute to massive growth in Australia's emissions into the future. While Australia obviously had, and still has, the capacity to do much more by way of emissions reduction, the Kyoto agreement permitting Australia an 8% increase in emissions of 6 greenhouse gases by 2012 over 1990 levels has ultimately preserved the interests of farmers, miners and manufacturing industry.

#### **Per Capita in Perspective**



Australia continues to emit a large volume of greenhouse gases per capita in comparison to other OECD countries.

Australia's annual greenhouse gas emissions (excluding the land use, land use change and forestry sector) rose 31% between 1990 and 2008, and per capita emissions increased by 4% from 24.5 tonnes of carbon dioxide equivalent gas in 1990 to 25.6 tonnes in 2008.

Australia's relatively high per capita emissions reflect a number of factors, including:

- the dominance of coal as a fuel in producing electricity
- the production of many goods in Australia (with high associated emission levels such as agricultural products) which are exported<sup>4</sup>.

In light of this information, while Australia, with its small population might seem a relatively small contributor to total global emissions production, that it is permitted by International Agreements to continue to have such a high carbon footprint per capita illustrates a systemic inequity in the way global emissions targets are set.

It stands to reason that countries with large populations, large economies, or both, tend to be the largest emitting countries. While Australia has a very healthy economy at the present time by current global standards, it has a very small comparative population. Therefore focusing on absolute (or national) emissions levels can only give a partial understanding of the 'real' global greenhouse contribution of the people and industries of this country.

Amongst the 25 major emitters, per capita emissions vary substantially, with Australia, the USA and Canada having the highest per capita emissions of the OECD countries, (ranked 4<sup>th</sup>, 6<sup>th</sup> and

<sup>&</sup>lt;sup>4</sup> http://www.abs.gov.au/austats website as at 24/04/12 (direct quote).

7<sup>th</sup> globally). The per capita emissions of these countries are more than twice those of the EU (37<sup>th</sup> globally), six times those of China (99<sup>th</sup> globally) and 13 times that of India<sup>567</sup>.

In general, there is a strong relationship with income per capita, or perceived 'standard of living', and the emissions per capita figure. This could be seen as an indicator that countries with higher consumption and more energy intensive lifestyles at a per capita level, also create more emissions as a general assumption, although other factors do influence this figure, such as population density, and trade and energy mix.

Factoring in emissions from land-use change also influences per capita emissions figures. This currently represents an estimated one-third of emissions from developing countries.

Expectations on developing nations to address their emissions are warranted, but these countries are somewhat limited in their ability to reduce emissions by virtue of their burgeoning populations and industrial growth. For there to be a high level of expectation on developing nations, while developed countries with strong economies and considerable capacity to reduce emissions go unchecked and exercise little leadership, presents a basic equity issue. In order for this issue to be addressed, per capita emissions must be measured and reported to ensure that developing nations are not made a scapegoat for rising global emissions, and clear and equitable per capita targets should be set to 'even the playing field' with respect to emissions reductions and track towards a levelised human footprint.

So, given that there are significant influences on the way targets are set, and the true equity of carbon emissions reduction expectations, it stands to reason that applying a per capita target, rather than an absolute or national target, is a far 'fairer' system. This allows a government to de-couple population and emissions, giving a clearer picture of the true 'footprint' of its people.

When this is shown, the influence of the Australian resources industries is also clearly represented, as we each, as citizens, must take personal responsibility for the influence that our very high individual footprint has on global emissions. What this also does, is illustrate that while Australian citizens have a high footprint ordinarily (via our own lifestyle, transport choices, and general consumption), when the aggregated emissions of the resources industry is added to that total, our per capita emissions are at an irresponsibly high level, and do not represent the world leadership that this country has the capacity to demonstrate. This is also pertinent to examine in light of the Australian Kyoto targets, and the inequitable way in which Western Australia as a State contributes to our achievement (or failure to achieve) those targets.

<sup>&</sup>lt;sup>5</sup> http://data.worldbank.org/indicator/EN.ATM.CO2E.PC website as at 27/04/12.

<sup>&</sup>lt;sup>6</sup> http://www.eia.gov/emeu/international/carbondioxide.html website as at 30/04/12.

<sup>&</sup>lt;sup>7</sup> http://www.wri.org/publication/navigating-the-numbers website as at 30/04/12.

#### **WA's True Influence on Carbon Emissions**

WA's average per capita greenhouse gas emissions are considerably higher than for Australia in general. This can be attributed largely to WA's high level of economic output relative to population and the heavy emphasis of the State's economy on resources and energy development and exports.

The State of the Environment Report 2007<sup>8</sup> indicates that most of WA's greenhouse gas emissions are linked to the energy and agricultural sectors. According to the Australian Greenhouse Office, the energy sector (including stationary and transport energy) was responsible for 74% of WA's emissions in 2004 and increased by 58% between 1990 and 2005 to 49 million tonnes CO2-e. About half of the increase was from growth in electricity and heat production, petroleum refining, manufacture of solid fuel and other industries.

As previously mentioned, with Western Australia's reliance on a large number of energyintensive, export-oriented industries including oil and gas, minerals, bauxite refining and iron ore production and continued growth in these industries in the short term future, significant increases in emissions from the energy sector are anticipated.

Transport energy consumption generates about 19% of emissions from the energy sector (and 14% of overall emissions), due to WA's overwhelming reliance on motor vehicles for moving people and freight. This is exacerbated by historical patterns of low density urban development and the vast distances between settlements in WA.

Although WA's agricultural sector produces approximately 10% of the State's greenhouse gas emissions, most of which are from methane generated by livestock and the burning of savanna grasslands, the agricultural industries are largely exempt from participating in the Commonwealth Government's Clean Energy Futures legislation as a non-covered sector (although they do have access to emissions reduction opportunities as part of the Carbon Farming Initiative to a degree).

Emissions from the land use, land use change and forestry sector in Western Australia declined markedly (about 115%) between 1990 and 2004, due to reductions in land clearing and an increase in the area of plantations. If the overall benefit from this sector is excluded from the State's greenhouse gas emission profile, the State's emissions increased 45% (as opposed to 17%) over this period.9

<sup>&</sup>lt;sup>8</sup> State of the environment report : Western Australia : 2007 / Environmental Protection Authority

<sup>&</sup>lt;sup>9</sup> State of the environment report : Western Australia : 2007 / Environmental Protection Authority

Below are ten of WA's biggest producers of carbon emissions (per annum).

Figure 1. The Million Tonnes Per Annum Club – Western Australia's Biggest Emitters

Facility		Operator	Emissions (tpa CO2e)	Source of data
1.	North West Shelf LNG	Woodside Energy Ltd	8,229,511	NGER 2010-11
2.	Verve Energy	Verve Energy	7,918,036	NGER 2010-11
3.	Alumina refineries and associated facilities	Alcoa Australia	4,340,000	Alcoa 2009 sustainability report (total WA figure)
4.	Worsley alumina refinery	BHP (Worsley Alumina Pty Ltd)	3,700,000	EPA Bulletin 1209
5.	Alinta Gas reticulation/power generation	Alinta Energy	3,687,078	Estimate based on NGER 2010-11
6.	Wesfarmers, CSBP and related facilities	Wesfarmers Ltd	1,635,000	Data provided by Company
7.	Burrup; Ammonia Plant	Burrup Fertilisers Pty Ltd	1,484,877	NGER 2010-11
8.	Collie; Bluewaters Power Station (229mw)	Griffin Energy Pty Ltd	1,300,000	EPA Bulletin 1160
9.	Collie; Bluewaters Power Station Phase II (229mw)	Griffin Power Pty Ltd	1,300,000	EPA Bulletin 1177
10.	Munster, Cement manufacture	Cockburn Cement (Adelaide Brighton)	1,141,150	Adelaide Brighton 2010 sustainability report
	Totals		34,735,652	

Figure 2. Western Australia's Slightly Smaller Emitters (500,000 to 1,000,000 tpa)

Facility	/	Operator	Emissions (tpa CO2e)	Source of Data
1.	North West Shelf; Varanus Island Processing Hub and associated facilities	Apache Northwest Pty Ltd	671,471	NGER 2010-11
2.	ERM Kwinana; NewGen power station (320mw)	NewGen Power Kwinana Pty Ltd	796,720	NGER 2010-11
3.	Mt Keith Power Station	TEC Desert Pty Ltd & TEC Desert No. 2 Pty Ltd (t/a Southern Cross Energy Partnership - owned by Transalta)	698,597	NGER 2010-11
4.	Telfer Project and associated facilities	Newcrest Mining Limited	674,566	NGER 2010-11
5.	Pilbara Iron Ore & Infrastructure Project: East-West Railway and Mine Sites (Stage B)	Fortescue Metals Group Limited	643,500	EPA Bulletin 1202
6.	Neerabup; 330MW Gas-Fired Power Station	NewGen Neerabup Pty Ltd	590,000	EPA Bulletin 1268
7.	Mt Margaret (Murrin Murrin) Nickel-Cobalt Project	Minara Resources Ltd	560,804	NGER 2010-11
8.	Muchea; Chandala Synthetic Rutile	Tiwest JV	584,256	NGER 2010-11
	Totals		5,219,914	

Figure 3. Additional projects the WA Government supports (over 1mtpa) – Manufacturing

Fac Ge	me/Location; ility name, neral business ction	Operator	Predicted Scope 1 GHG Emissions in CO2e tpa	Additional with highest CO2e estimate	Total peak production emissions	Source of data
1.	Browse Basin; Prelude Floating LNG project	Shell	2,300,000		2,300,000	Draft environmental impact statement
2.	Onslow; Ashburton North (Scarborough) LNG plant	BHP Billiton	3,000,000		3,000,000	Estimate based on proposed production capacity
3.	Collie; Shotts, urea plant	Perdaman Industries	3,400,000		3,400,000	EPA Report 1358
4.	Burrup Peninsula; Pluto LNG Development	Woodside Energy Ltd	4,100,000	4,100,000	8,200,000	EPA Bulletin 1259 and press reports
5.	Gorgon Gas Development Barrow Island	Chevron Australia	5,450,000	6,500,000	11,950,000	EPA Bulletin 1323 and press reports
6.	Onslow; Wheatstone LNG	Chevron Australia	10,328,000	4,000,000	14,328,000	EPA Report 1404 and press reports
7.	Browse Basin; Browse LNG precinct	Woodside Energy Ltd	12,000,000	27,000,000	39,000,000	Browse LNG Strategic assessment report
	Totals				82,178,000	

Interestingly, while Governments often espouse gas as a 'cleaner', transition fuel source for taking steps towards a low carbon economy, figures 3 and 4 show that new gas developments make up 89,897,613tpa CO2 e of the total, so gas as an alternative to other fossil and renewable fuel sources should be interrogated further in the context of State and Commonwealth investment and subsidisation.

Figure 4. Additional projects the WA Government supports (over 1 mtpa) – Extractive Mining

Fac Ge	me/Location; cility name, neral business action	Operator	Predicted Scope 1 GHG Emissions in CO2e tpa	Additional with highest CO2e estimate	Total peak production emissions	Source of data
1.	Browse Basin; Ichthys/Ichthy s North/Ichthys West/Burnside , gas	Inpex (Japan)	7,000,000		7,000,000	Environmental impact statement
2.	Cape Preston; Iron ore mine & downstream processing	Mineralogy Pty Ltd	2,700,000	2,900,000	5,600,000	EPA Report 1340 - Higher estimate in Proponent's Greenhouse gas management plan
3.	Cape Preston; Central Block, Sino Iron Project	Sino Iron (CITIC)	5,558,000		5,558,000	EPA Bulletin 1056
4.	Browse Basin upstream development; Brecknock, Calliance & Torosa, gas	Woodside Energy Ltd	1,113,430	1,206,183	2,319,613	Browse draft upstream EIS
5.	Timor Sea; Sunrise, gas	Woodside Energy Ltd	1,800,000		1,800,000	Press reports
6.	Jack Hills, magnetite	Crosslands	1,738,586		1,738,586	Public environmental review
	Totals				24,016,199	

As illustrated by the tables above, WA is in a challenging situation for reducing emissions, particularly when considered in a global context. And as further illustrated, gas may not necessarily provide the 'clean transition fuel' that is often promised if the carbon costs of extraction processes and other associated emissions are taken into account.

## A Call for Economic Equity

Additionally, as new economic instruments are being applied to internalise 'externalities' and compensate for market, policy and political failures, there would appear to be few clearly articulated mechanisms for addressing current perverse financial allocations, subsidisation and compensation by the current State and Commonwealth Governments, and many previous Governments before them.

Subsidised fuel, coal fired energy generation and perverse incentives for energy intensive development without carbon targets or incentives might be seen as an 'on principle' disincentive for individuals to reduce their own emissions, as they ostensibly give rise to a powerlessness to effect change, if community perceives that 'big industry' is being paid to pollute.

According to a 2007 study from the Institute for Sustainable Futures carried out for Greenpeace Australia Pacific, total energy and transport subsidies in Australia during 2005-06 amounted to between \$9.3 billion and \$10.1 billion. Of that, over 96% of the identified energy and transport subsidies provided support for fossil fuel production and consumption. Less than 4% of the identified subsidies provided support for renewable energy and energy efficiency. The coal industry received substantial support of approximately \$1.7 billion in 2005-06 and renewable energy, by comparison, approximately \$326 million<sup>10</sup>.

While it is acknowledged that Commonwealth initiatives such as the Community Energy Efficiency Program and other future streams of funding allocated by the Commonwealth Government might redress some of these perverse subsidy issues into the future, allocating funding, without addressing current market failures is merely putting strain on the economy while not adequately addressing the environmental issues which assumedly underpin the scheme.

This Office makes a recommendation to the Commonwealth Government to commission an investigation and report into high emitting industries (fuel / energy industries) that are currently receiving significant subsidies and tax incentives which have not yet been redressed by the Clean Energy Futures Package, and to consider whether those industries would be sustainable without subsidisation (when all costs including environmental costs are calculated), or whether alternative allocations of those subsidies would be more beneficial to long term sustainability and investment into the renewable energy industry. This would ensure that its recently released Clean Energy Futures Package is as effective as it can be and does not compete with any existing perverse subsidies.

<sup>10</sup> http://www.isf.uts.edu.au/publications/riedv2007subsidies.pdf

#### The Research Limits of this Report

This report has attempted to calculate an emissions estimate for the State of Western Australia, focusing primarily on the mining and resources industries.

There are at least 53 operating facilities and 167 proposed projects for which a current emissions figure could not be obtained. Projects which are on "Care & Maintenance" are listed with the proposed projects.

The accompanying spreadsheet lists the results obtained to date, with references to relevant information sources.

This data focusses on interrogating the point source emissions of companies operating in Western Australia and wherever possible deals with facility level emissions. This is deliberate, to differentiate the findings from aggregated NGERS or EPA records, but also to show the level of contribution of the Western Australian mining and resources industries and their individual footprints as companies.

As some of the 'facility level' emissions data was not available to our researchers (either as a result of companies being unwilling to share this information, or unable to provide the data), some extrapolations have had to be made from National GHGe figures, and estimations of WA contributions to this figure have been derived.

Data for non-point source emissions (e.g. general transport; prescribed burning, etc.) derived from National Greenhouse Gas Inventory tables have been included to give a context to the total state emissions figure, however this Office is very conscious of the fact that not all emissions data has been captured in this report.

What these data suggest is that when the WA total greenhouse gas emissions (GHGe) figure for 2012 is published, it will show another large increase over the previous years, signaling an ever increasing emissions profile and an ever decreasing probability that Australia will meet the targets set out in the recent Clean Energy Future Package.

The data also demonstrates the impact of proposed projects – a doubling of WA's emissions if only a proportion of these projects proceed, and possible tripling of emissions against 1990 baseline reporting data.

#### The Legal Limits of Reporting Frameworks

Since 2008 GHGe reporting has been overseen by the Greenhouse and Energy Data Officer (GEDO) - since 2 Apr 2012 replaced by the Clean Energy Regulator - using the authority of the National Greenhouse and Energy Reporting Act 2007 (NGER).

Extracts from the information provided by the Clean Energy Regulator are published by the Department of Climate Change and Energy Efficiency. This results in two main data sets.

Firstly, the National Greenhouse Gas Inventory (NGGI)<sup>11</sup>, which can be interrogated on a state by state basis, providing a breakdown to two levels of detail.

These figures are an aggregation of company returns which in themselves are a total of the estimated GHGe for each facility emitting more than the threshold amount (currently 25kTpa), derived from formulae and modelling of GHGe, expressed as tonnes of carbon dioxide equivalent (CO2e) per annum.

Secondly, companies which report aggregated GHGe in excess of a threshold figure (currently 87.5kTpa) have their emissions reported in the NGER tables<sup>12</sup>. These emissions are separately enumerated as either scope 1 emissions (directly produced) or scope 2 emissions (indirectly produced, and counted elsewhere as scope 1 emissions against another company). Because this data is only reported as a national total for each company, the figure for emissions produced by company activities in WA cannot be readily determined.

Furthermore, as revealed in publicly available company documents and information provided by the EPA, GHGe are not taken into account in the EPA reporting process when the projected total emissions for a proposed project are less than 100kTpa.

<sup>11</sup> http://ageis.climatechange.gov.au/ website as at 2/4/12.

http://www.cleanenergyregulator.gov.au/National-Greenhouse-and-Energy-Reporting/Publication-of-NGERdata/NGER-Greenhouse-and-Energy-information-2010-2011/Pages/default.aspx website as at 4/4/12.

#### A State Government Strategy?

"The State Government established the Office of Climate Change in May 2007 to coordinate a whole of government response to the twin challenges of climate change adaptation and mitigation.

Now re-named, the Climate Change Unit is located within the Department of Environment and Conservation and is responsible for the whole of State Government coordination of policy and strategy regarding the economic, environmental and social impacts of climate change."13

At the present time, there is no clearly defined, publicly released mechanism by which the WA government intends to contribute to meeting Commonwealth emissions targets, or monitor progress towards the target by its emissions intensive industry.

The long promised Western Australian Climate Change Adaptation and Mitigation Strategy, which has been under development for over 18 months, has not been released for public consultation or comment, and therefore has no ability to influence any sector's progress towards a low carbon economy, nor to ensure that Government Departments responsible for industry regulation and policy are being held to account for State emissions increases.

Additionally the current State strategy on reducing emissions seems to be to attempt to sabotage the Commonwealth's Clean Energy Futures legislation by influencing public opinion in a negative manner. In a recent interview the Western Australian Premier stated that he was going to attempt to itemise the impact of the Carbon Pricing Mechanism on WA household power bills.14

As a strategy, this seems a purely political one, in no way designed to address the environmental issues inherent in our overly consumptive Western Australian lifestyles. Secondly, it overlooks the glaring issue of this Government's reticence to invest in a sustainable energy economy. If the State had invested in renewable energy sources for power generation, invested in and upgraded its own energy infrastructure to ensure access for renewables, enforced appropriate reduction strategies on exceedingly polluting industries in a timely fashion, and supported Western Australian householders to move towards renewable energy and efficiency, the Western Australian community would not be facing such a substantial carbon liability now.

<sup>13</sup> http://www.dec.wa.gov.au/content/category/30/828/1927/ website as at 20/9/11.

<sup>14</sup> http://www.abc.net.au/news/2012-05-10/power-prices-to-rise-in-wa/4002700/?site=perth&section=news

Strategies similar to Premier Barnett's plan to legislate for the publication of the 'carbon costs' of energy on power bills, when this was first mooted in the Eastern States recently, prompted the ACCC to indicate that they would scrutinise bills to ensure that no false claims were being made.

There can be no doubt that our transition towards a low carbon future will be challenged by the nature of WA's economy, which is primarily focused on trade-exposed export industries, mostly with high emissions intensities.

If little or no pressure is exerted by the State Government with respect to stringent emissions standards for new and existing industry, and public access to emissions data for many mining and resources companies continues to be inaccessible, the Western Australian community can assume that it will retain its disappointing status of 'World's Greatest Per Capita Carbon Polluters'.

However, WA is well placed to take action on reducing greenhouse gas emissions through development of alternative energy sources (e.g. wind, solar), improving energy efficiency and generating carbon offsets (e.g. bio-sequestration to offset carbon dioxide emissions through the Carbon Farming Initiative). It is also infinitely capable of developing engineering solutions to issues of fugitive and secondary emissions, and reducing its footprint while creating jobs and developing innovative industry. A State Government focused only on the exploitation of its finite resources in the short term, and not at all on the renewable resources that will fuel our future, is a negligent and nearsighted Government.

It is the aspiration of this Office, to ensure that **all** Western Australian mining / resources / major development projects are required to submit, not only to the EPA or NGERS, but for the public record, evidence of their current and future emissions, and that this record should be held by the Western Australian Department responsible for Climate Change Management.

Given the enormity of the sector's footprint, and the fact that it contributes so greatly to the per capita emissions profile of the Australian people, it is reasonable to request that the sector demonstrate its current profile, its future profile, and its commitment to reducing that profile on behalf of the Australian people.

It is also reasonable to request that the Commonwealth investigate the level of current subsidies to these industries as a comparison with the subsidisation packages currently available through the Clean Energy Futures Package to ensure that the Renewable Energy Industry, which represents an investment into the future economic and environmental sustainability of Western Australia, is not disadvantaged by perverse allocations of funding to industries which, by their nature, are both finite and damaging.

The attached spreadsheets give a detailed overview of the data that this report has been able to synthesise to date for the emissions profile of Western Australian Industry.

Please contact the Office of Robin Chapple MLC for more information on 9486 8255 or melanie.bainbridge@mp.wa.gov.au.

#### **Glossary**

CO2e	Carbon dioxide equivalent
Kyoto	The Kyoto Protocol
LNG	Liquefied natural gas
Mt	Million tonnes
Mtpa	Million tonnes per annum
NGER	National Greenhouse and Energy Reporting
Тра	Tonnes per annum

# **Further Reading**

- A Bright Future: 25% Renewable Energy for Australia by 2020 Australian Conservation Foundation (2007).
- Australian Government (2007). Australian Government Renewable Energy Policies and **Programs**
- Diesendorf, Mark (2007). Paths to a Low Carbon Future
- Renewable Energy A Contribution to Australia's Environmental and Economic Sustainability Renewable Energy Generators Australia (2006).
- The Natural Edge Project, Griffith University, ANU, CSIRO and NFEE (2008). Energy Transformed: Sustainable Energy Solutions for Climate Change Mitigation
- http://beyondzeroemissions.org/ Zero Carbon Australia 2020 (2010).
- Australia's Polluting Power: Coal-fired electricity and its impact on global warming. Dr Mark Diesendorf, WWF Australia.
- http://www.isf.uts.edu.au/publications/riedy2007subsidies.pdf Energy and Transport Subsidies in Australia. Chris Riedy, Institute for Sustainable Futures, University of Technology Sydney Report for Greenpeace Australia Pacific (2007).
- http://www.acfonline.org.au/sites/default/files/resources/Funding the Transition to a <u>Clean Economy - An ACF report.pdf</u> Australian Conservation Foundation, 2012.